

MAT 3501 - Numbers, Functions, Modelling - F'19 TuTh 9:30-10:45 - PC 445

Textbook: "The Mathematics that every secondary school math teacher needs to know", by Sultan and Artzt, ISBN 978-0-415-99413-2

Instructor: Tedi Draghici **Website:** <http://faculty.fiu.edu/~draghici>
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Office Hours (in DM 432B): MoWe 11:00-12:30; other times by appointment.

Pre-requisite and expectations: Calculus 2, Discrete Mathematics are the pre-requisite courses. If you haven't successfully passed these courses, you should see me. We will often consider concepts from these prerequisite courses, but we will expand the horizon on these concepts and the relations between them. This class will be partially flipped. This means that you will be asked to read and take notes from certain sections in the book or from handouts, **before** the corresponding topics are covered in class. I will still briefly lecture in class on certain theoretical topics. Almost every class (exception are exam, or review for exam days) there will be a group-worksheet that will have to be submitted at the end of the class. You should devote ample time to work out all the suggested homework problems. Exam questions will come primarily from the suggested homework or from the announced theoretical topics (proofs that you need to study). The daily topics and the suggested assignments will be recorded on the class website (see my homepage). You are expected to acquire a certain degree of mathematical maturity from this course, you will be asked to understand, reproduce and conceive basic proofs.

Method of Evaluation: Your final grade in the course is based on:

1. Quizzes, Worksheets, Participation - 24%
2. Midterm exam 1 - 24% - Tuesday, October 1
3. Midterm exam 2 - 24% - Thursday, October 31.
4. FINAL EXAM - 28% - TBA.

Grade-scale: The following percentages will guarantee the associated grade:

> 90 : A	88-90 : A-		
85-88 : B+	80-85 : B	78-80 : B-	
75-78 : C+	65-75 : C		
50-65 : D	< 50 : F		

NO MAKEUP for missed classwork. If you have a **documented** excuse, the missed classwork may be replaced by the average of the rest.

Attendance: You will often have class group work (sometimes collected), so attendance is, in effect, mandatory.

Drop deadlines -- Last day to Add/Drop with tuition refund: Tuesday, Sep. 3;
-- Last day to drop with a DR grade (but no refund): Monday, Nov. 4.

Topics to be covered: Selected sections from Chapters 1-9 in the textbook or handouts. These sections will be precisely indicated on the class website, as well as the corresponding suggested exercises from the textbook. You have to check the webpage often for updates. You are expected to spend a minimum of 15 hours a week outside of class on homework and reading.

The instructor reserves the right to make any changes he considers academically advisable. These eventual changes would be announced in class and recorded on the website. You are responsible to be aware of them.